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(54) **A dispenser-container containing wet and dry contents and process for manufacturing the same.**

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Description

Background of the Invention

Field of the Invention

The present invention relates to a dispenser-container containing wet and dry contents, especially, wet contents required to be hermetically sealed and the dry contents which do not require to be hermetically sealed. The present invention also relates to a method for manufacturing the dispenser-containers.

In particular, the present invention relates to a dispenser-container suitable for containing fibrous materials wetted with cosmetic in a liquid or milky lotion state, which materials are required to be hermetically sealed together with fibrous materials in a dry condition, which materials do not need to be hermetically sealed. The contained fibrous materials can be individually dispensed from the dispenser-container, and the dispenser-container is able to repeatedly and reliably seal, especially the fibrous materials wetted with cosmetic, which materials need to be hermetically sealed.

Description of the prior Art

Recently, fibrous materials, for example, non-woven fabrics have been utilized widely for cleaning skin or for make up, the fibrous materials being impregnated with cosmetic, containing alcohol,. moisturizing agent, surfactant and so on, and having a cleaning effect. Such fibrous materials impregnated with toilet water are packed in a cylindrical container or in a small dispenser-container for portable use.

Further, a small dispenser-container containing non-woven fabrics impregnated with calamine lotion is used for a portable toilet article.

Such small dispenser-containers containing fibrous materials impregnated with cosmetic as described above are convenient for portable us. Upon make up, fibrous materials in a dry condition, such as a cut cotton layer for toilet use or tissue papers, are simultaneously used, and therefore, it will be more convenient if fibrous materials impregnated with cosmetic and fibrous materials in a dry condition can be carried together.

Besides, conventionally sold under the trademark "Band-Aid", and well used is a small prepared bandage of gauze and adhesive tape for small wounds, such as for a cut or an abrasion. The bandage can be readily used for treating a cut or abrasion and is particularly very convenient for treating a cut or abrasion of a small child.

However, a child may easily slip and fall and is often injured while he or she is playing in the open air. In such a case, mud often adheres to a wound, and accordingly, prepared bandages of the "Band-Aid" type cannot be applied to the wound until the mud is removed or the wound is disinfected.

Under the situations described above, a product, in which prepared bandages of the "Band-Aid" type and a gauze or cotton impregnated with disinfectant are combined together and which is portable, may be convenient for the treatment of a wound in the open air. However, such a product has not been manufactured nor sold.

The present applicant previously proposed in EP-A-119 314 a dispenser-container for toilet use, in which wet and dry contents can be contained and by which wet contents can be repeatedly resealed. In this dispenser-container containing wet and dry contents, three sheets are superposed, and the peripheries of the sheets are sealed while the contents to be contained are inserted into spaces between the sheets. Openings are formed in the outer two sheets, respectively, of the three sheet for dispensing the contents therethrough, and the opening formed in one of the outer sheets is formed in an outer sheet and is covered by a flap having pressure sensitive adhesive applied thereon.

In the conventionally known dispenser-container containing wet and dry contents, one of the compartments has a flap, and therefore, it is suitable for containing fibrous materials impregnated with cosmetic in a liquid or milky lotion state and fibrous materials in a dry condition, however, it is relatively difficult to manufacture. More specifically, when the dispenser-containers are continuously manufactured, the wet fibrous materials are placed on the first sheet, and the second sheet is supplied over them, and then, the materials in a dry condition are placed on the second sheet in such manner that the materials in a dry condition overlie the wet fibrous materials, and further the third sheet is supplied over them so that the wet and dry contents are placed at spaces sandwiched by the three sheets, i.e., the first through third sheets, and the overlain three sheets are heat sealed to form dispenser-containers.

However, in such a manufacturing process, it is not easy to supply contents at spaces between the sheets. It is also not easy to transfer to the heat sealing station these contents, which are stacked with each other and sandwich the second sheet therebetween, while the third sheet is supplied onto the stacked contents and while the stacked contents are prevented from crumbling. Furthermore, the process requires delicate setting, controlling and adjusting of the heat sealing conditions, and the setting, controlling and adjusting are very troublesome.

Further, when contents of one type are impregnated with liquid therein, the impregnated liquid may leak out or flow out while the contents are transferred, and as a result, the leaked liquid may wet other kinds of contents and diminish the commercial value of the dispenser-container, or the portion to be heat sealed is wetted and cannot be easily sealed.

In addition, in the above described dispenser-

container, relatively thick sheets are used so as to be impervious against gas, and the materials of the three sheets are the same so as to facilitate easy heat sealing. Accordingly, the cost of the sheets may be relatively expensive.

Objects of the Invention

An object of the present invention is to provide a dispenser-container containing wet and dry contents, by which the above-described problems inherent in the prior art can be obviated, and the continuous manufacture of which can be done easily, and the manufacturing cost of which can be low.

Another object of the present invention is to provide a method for continuously manufacturing such a dispenser-container.

Summary of the Invention

According to the present invention, the above-described problems are overcome by a dispenser-container containing wet fibrous materials and dry materials separated from each other, comprising:

a first container made of a gas impervious material and containing the wet fibrous materials;

said first container including one of a first opening and a first weakened line for forming the first opening, to permit dispensing of the wet fibrous materials therethrough;

a flexible flap for releasably covering the first opening, and including a pressure sensitive adhesive which permits the flap to be repeatedly attached to and removed from said first container;

a second container containing both the first container and dry materials stacked together;

said second container including a first surface having one of a second opening and a second weakened line for forming said second opening to permit dispensing of said dry materials therethrough and

said second container contains said first container and includes a third surface having one of a third opening and a third weakened line for forming said third opening at a position corresponding with said first opening.

According to the present invention, the above-described problems are overcome by the following three methods.

The first method of producing a dispenser-container containing wet fibrous materials and dry materials separated from each other, comprising the steps of:

preparing a first container made of a gas impervious material and containing the wet fibrous materials, said first container including one of a first opening and a first weakened line for forming the first opening, to permit dispensing of the wet fibrous materials therethrough, a flexible flap for releasably covering said first opening and a pressure sensitive adhesive which permits said flap to be repeatedly attached to and removed from said first container;

forming one of a third opening and a third weakened line for forming said third opening, in a continuous sheet;

forming one of a second opening and a second weakened line for forming said second opening in the continuous sheet at a position parallel to and offset from said third opening, to permit dispensing of the dry materials therethrough;

positioning said first container on the continuous sheet with the flap thereof coinciding with said third opening formed in the continuous sheet, and positioning the dry materials in stacked relation on the surface of said first container opposite to the flap;

wrapping the stacked first container and dry materials with the continuous sheet such that said second opening is formed with respect to the dry materials;

sealing at least two longitudinal edges of the continuous sheet with each other; and

sealing the continuous sheet in a transverse direction.

Another method of producing a dispenser-container containing wet fibrous materials and dry materials separated from each other, comprising the steps of:

preparing a first container made of a gas impervious material and containing the wet fibrous materials, said first container including one of a first opening and a first weakened line for forming the first opening, to permit dispensing of the wet fibrous materials therethrough, a flexible flap for releasably covering the first opening and a pressure sensitive adhesive which permits the flap to be repeatedly attached to and removed from said first container;

forming one of a third opening and a third weakened line for forming said third opening, in a continuous sheet;

positioning the first container on the continuous sheet with the flap thereof coinciding with the third opening formed in the continuous sheet, and positioning the dry materials in stacked relation on the surface of said first container opposite the flap;

wrapping the stacked first container and dry materials with the continuous sheet;

overlapping longitudinal edges of the continuous sheet with each other to form a second opening to permit dispensing of the dry materials therethrough; and

sealing the continuous sheet in a transverse direction.

The remaining method of producing a dispenser-container containing wet fibrous materials and dry materials separated from each other, comprising the steps of:

preparing a first container made of a gas impervious material and containing the wet fibrous materials, said first container including one of a first opening and a first weakened line for forming the first opening, to permit dispensing of the wet fibrous materials therethrough, and a flexible flap for releasably covering the first opening, by a pressure sensitive adhesive;

forming one of a third opening and a third

weakened line for forming the third opening, in a first continuous sheet.

forming one of a second opening and a second weakened line for forming the second opening in a second continuous sheet, to permit dispensing of the dry materials;

positioning the first container and said dry materials between the first and second continuous sheets such that the flap is positioned coinciding with the third opening of the first continuous sheet, the dry materials are positioned in stacked relation with said first container on the surface thereof opposite to the flap and in correspondence with the second opening in the second continuous sheet;

sealing longitudinal edges of the first and second continuous sheets with each other; and

sealing the continuous sheets in a transverse direction.

Brief Description of the Drawings

The present invention will now be explained in detail with reference to the accompanying drawings, wherein:

Fig. 1 is a perspective view of an embodiment of a dispenser-container containing wet and dry contents of the present invention;

Fig. 2 is a perspective view showing the rear side of the dispenser-container containing wet and dry contents illustrated in Fig. 1;

Fig. 3 is a cross sectional view taken along line III-III in Fig. 1 (wherein a weakened line for forming an opening remains uncut);

Fig. 4 is a top plan view showing one side of the dispenser-container containing wet and dry contents illustrated in Fig. 1;

Fig. 5 is a rear plan view showing the side opposite to that illustrated in Fig. 4;

Figs. 6 through 11 are views illustrating alternative embodiments of the second container, wherein

Fig. 6 is a top plan view illustrating the top surface of the second container, which surface contacts the outer surface of the first container;

Fig. 7 is a top plan view similar to Fig. 6 and illustrating another embodiment;

Fig. 8 is a rear plan view illustrating another embodiment of the second container;

Fig. 9 is a cross sectional view taken along line IX-IX in Fig. 8;

Fig. 10 is a rear plan view illustrating still another embodiment of the second container; and

Fig. 11 is a cross sectional view taken along line XI-XI in Fig. 10;

Fig. 12 is a cross sectional view showing a part of an embodiment of a dispenser-container containing wet and dry contents of the present invention;

Fig. 13 is a cross sectional view showing a part of a dispenser-container containing wet and dry contents before a second container is shrunk;

Fig. 14 is a cross sectional view showing the part of the dispenser-container containing wet and dry contents after the second container is shrunk;

Fig. 15 is a top plan view of another embodiment;

Fig. 16 is a cross sectional view taken along line XVI-XVI in Fig. 15;

Figs. 17 and 18 are perspective views illustrating different embodiments of the first container;

Fig. 19 is a perspective view illustrating a first container of another type;

Fig. 20 is a cross sectional view taken along line XX-XX in Fig. 19;

Fig. 21 is a perspective view of another embodiment of the dispenser-container of the present invention;

Fig. 22 is a cross sectional view of a part of the sheet of the first container; and

Figs. 23, 24 and 25 are flow diagrams of embodiments of manufacturing processes according to the present invention, respectively.

Description of the Preferred Embodiments

As illustrated in Figs. 1 through 3, the dispenser-container containing wet and dry contents of the present invention comprises: a first container 1 containing fibrous materials 3 impregnated with liquid, for example, a liquid or milky lotion type cosmetic, disinfectant, etc. (which materials will be referred to as wet fibrous materials); and a second container 2 containing both the first container 1 and materials 4 in a dry condition.

The liquid used to impregnate the wet fibrous materials is not limited as long as it is in a liquid state or it is an emulsion of sufficiently low viscosity to be pourable, such as a milky lotion. For example, the liquid may be softening toilet water, freshening toilet water or cleaning toilet water, calamine lotion, moisture lotion, disinfectant and so on.

Soft non-woven fabrics, cut cotton layers for toilet use, gauze, absorbent cotton, and so on may be used for the wet fibrous materials.

Soft non-woven fabrics, cut cotton layers for toilet use, gauze, tissue papers, prepared bandages of the "Band-Aid" type and so on may be used for the materials in a dry condition.

In the embodiment illustrated in Figs. 1 through 5, the first container 1 is made of an impervious sheet which prevents gas and liquid from escaping and is substantially flat. Thus, container 1 hermetically contains the wet fibrous materials.

The gas impervious sheet may be a film made of synthetic resin such as polyethylene, polypropylene, polyamide, polyester, and polyvinyl chloride, and the film may be a single layer or a laminated layer. The film may be a laminated layer of the above-mentioned film and an aluminum sheet.

The first container 1 has a perforated line 13 formed in the (outer) surface 11 thereof contacting the second container 2; and flap 5 made of a flexible sheet-like material similar to the material of the first container 1 and covering the perforated line 13.

The flap 5 has a pressure sensitive adhesive 51 applied to the inside surface thereof, i.e., the side contacting the outer surface 11 of the first container, 1 except for a grip portion 52. Due to the pressure sensitive adhesive 51, the flap can be repeatedly adhered to and removed from the first

container 1.

Before use, the perforated line 13 is covered by the flap 5. Once the flap 5 is taken up from the first container 1, the portion 14 surrounded by the perforated line 13 is removed from the first container 1 and is adhered to the pressure sensitive adhesive 51 as illustrated in Fig. 1. Accordingly, the space formed by the removal of the portion 14 is used as an opening 11a for dispensing the wet fibrous materials 3.

With perforated line 13, the user is assured that nobody has taken the contents out of the first container 1 before the user uses it. Instead of the perforated line 13, a hole may be formed in the first container for dispensing the wet fibrous materials 3.

The second container 2 is a package simultaneously containing the first container 1 and the materials 4 in a dry condition, the material of the second container 2 may be a single layered or laminated layered film made of the same synthetic resins as mentioned above in connection with the material of the first container 1, or cellophane. Since impervious ability against gas and liquid is not required for the second container 2, a sheet-like material having a thickness thinner than that of the first container 1 can be used for the second container 2.

As illustrated in Fig. 3, the first container 1 and the materials 4 in a dry condition are stacked with each other in such a manner that the inner surface 12, i.e., the surface opposite to the surface 11 having the perforated line 13, contacts the materials 4 in a dry condition, and the materials 4 are contained in the second container 2.

As illustrated in Figs. 1 and 4, an opening 21a is formed in the surface 21 of the container 2, which surface contacts the outer surface 11 of the first container 1, at a portion corresponding to the flap 5 attached to the first container 1. Accordingly, if the flap 5 of the first container 1 is opened at the opening 21a as illustrated in Fig. 1, the wet fibrous materials 3 can be removed through the opening 11a of the first container 1.

As illustrated in Figs. 2 and 5, a perforated line 26 is formed in the surface 22 of the second container 2 opposite to the surface 21 and will be used to form an opening for dispensing the materials 4 in a dry condition. An opening may be formed instead of the perforated line 26. However, the perforated line is more preferable, because the second container 2 assures a user that nobody has taken the contents out of the second container before the user uses it.

The second container 2 is a three sided seal package formed by heat sealing the edges 23 and a longitudinal side edge 24.

Upon use of the above-described dispenser-container containing wet and dry contents, if the wet fibrous materials 3 are desired to be taken out, the grip portion 52 of the flap is pulled up to open the opening 11a of the first container 1, and the wet fibrous materials 3 are taken out through the opening 11a. Then, the opening 11a is covered by the flap 5. If the materials 4 in a dry condition are desired to be removed, the dispenser-container containing wet and dry contents is first turned upside down, an opening is formed along the perforated line 26, and then the materials 4 in a dry condition are taken out.

Various alternative embodiments of the second container 2 are illustrated in Figs. 6 through 11.

Fig. 6 is a plan view illustrating the surface 21 of the second container 2, which surface contacts the outer surface 11 of the first container 1. The illustrated embodiment has a perforated line 27 and a continuous punched line 28 connected to the perforated line 27, which are formed instead of the opening 21a. The two kinds of lines 27 and 28 form a closed loop.

Upon use, the continuously punched portion 28 is gripped by means of fingers and is pulled up along the perforated line 27, the portion encircled by the closed loop is removed from the main body of the second container 2, and an opening is formed. Thus, the second container is then in a condition similar to that illustrated in Fig. 4. Accordingly, if the flap 5 of the first container 1 is opened through the thus formed opening, the wet fibrous materials 3 can be removed through the opening 11a formed in the first container 1.

In the embodiment illustrated in Fig. 6, the second container 2 per se has a sealing function, i.e., the user is assured that nobody has taken the contents out of the second container 2 before the user uses it. Accordingly, the first container 1 is not required to have such a sealing function. Therefore, the embodiment illustrated in Fig. 6 is suitable for containing a first container 1 having a hole for dispensing the wet fibrous materials 3 in place of a perforated line 13 illustrated in Fig. 3.

Fig. 7 is similar to Fig. 6 and is a plan view illustrating the surface 21 of the second container 2, which surface contacts the outer surface 11 of the first container 1. In the embodiment illustrated in Fig. 7, similar to that illustrated in Fig. 6, a perforated line 27 and a continuous punched line 28 connected to the perforated line 27 are formed instead of the opening 21a. Different from the embodiment illustrated in Fig. 6, the two kinds of lines 27 and 28 draw a U-shaped open loop. Accordingly, even if the perforated line 27 is cut, the portion surrounded by the open loop is not removed from the main body of the second container 2. Further, the continuously punched line 28 in Fig. 7 is so short that only the fingers can grip it, and the line 28 is prevented from being erroneously opened, while the continuously punched line 28 in Fig. 6 is relatively long to facilitate easy removal of the closed loop portion.

Further, unlike the embodiment illustrated in Fig. 1, in the embodiment illustrated in Fig. 7, the dispenser-container containing wet and dry contents is a four sided seal package wherein all the peripheries 23 and 24 of the second container 2 are heat sealed. The process for manufacturing this dispenser-container will be explained later with reference to Fig. 24.

Fig. 8 is a rear view illustrating another embodiment of the second container 2, and Fig. 9 is a

cross sectional view taken along line IX-IX in Fig. 8. The second container 2 of this embodiment is formed in a pillow type package. The dispenser-container containing wet and dry contents of this embodiment has heat sealed portions 23 at the edges and a longitudinal heat sealed portion 31 on the surface 22 which contacts the materials 4 in a dry condition. On the surface 22, the longitudinal sealed portion 31 is located at a position deviating a small distance from the center, and a perforated line 26 which will be used to form an opening for dispensing the materials 4 in a dry condition therethrough is located at the center. Fig. 9 illustrates an embodiment which has an opening 21a formed in the front surface 21 of second container 2 as shown in the first embodiment, however, a perforated line 27 or 28 may be formed instead of the opening as shown in the embodiments illustrated in Figs. 6 and 7.

Fig. 10 is a rear view of another embodiment of the second container 2, and Fig. 11 is a cross sectional view taken along line XI-XI in Fig. 10. The second container 2 of this embodiment is of a pillow configuration. However, only the edges 23 are sealed, and there is no longitudinal heat sealed portion. In other words, the longitudinal edges 32 and 33 overlap with each other at the side 22 contacting the materials 4 in a dry condition, as clearly illustrated in Fig. 11. Accordingly, the portion between the longitudinal edges 32 and 33 serves the function of an opening for dispensing the materials 4 in a dry condition, and the materials 4 in a dry condition can be removed therethrough.

Similar to Fig. 9, Fig. 11 illustrates an embodiment wherein an opening 21a is formed in the outer surface 21 of the second container 2, however, a perforated line 27 or 28 may be formed as illustrated in Figs. 6 or 7.

In the above-described embodiments, if the size of the second container 2 is selected such that it just wraps around the first container 1 and the materials 4 in a dry condition, the positional relationship of the flap 5 of the first container 1 and the opening 21a or the weakened lines 27 or 28 of the second container 2 will not be changed. It is preferable to provide a means for fixing the positional relationship between the first container 1 and the second container 2 in order to completely prevent any change in the positional relationship between the flap 5 of the first container 1 and the opening 21a or the weakened lines 27 or 28 of the second container 2 from occurring.

In the embodiment illustrated in Fig. 12, parts of the heat sealed portions 23 at the edges of the second container 2 are attached to parts of the heat sealed portions 11b at the edges of the first container 1 by means of heat sealing. This can be done as follows. For example, when the second container 2 is packed while the first container 1 and the materials 4 in a dry condition are wrapped, the heater used for heating the surface 21 of the second container 2 is widened so that the edges 11b of the surface 11 of the first container 1 are simultaneously heated, and then, the edges 11b of the surface 11 of the first container 1 and the surface 21 of the second container 2 are thermally attached together.

In another fixing method, a second container 2 of a shrink dispenser-container containing wet and dry contents may be used. As illustrated in Figs. 13 and 14, a film which can be shrunk by heat is first used to form a dispenser-container containing wet and dry contents by wrapping both a first container 1 and materials 4 in a dry condition (Fig. 13), and then, the dispenser-container containing wet and dry contents is heated in a shrink tunnel so as to shrink the second container 2 (Fig. 14). As a result, the second container 2 tightly contacts the first container 1 and the material 4 in a dry condition. Accordingly, the change of the positional relationship between the first container 1 and the second container 2 is prevented from occurring.

In this case, it is preferable that a uniaxial oriented film is used so that it shrinks only in a transverse direction or a longitudinal direction of the dispenser-container containing wet and dry contents. As a result, the second container 2 shrinks only in one direction, and accordingly, the position of the opening 21a or the weakened lines 27 or 28 of the second container becomes approximately constant after the dispenser-container containing wet and dry contents is shrunk. Accordingly, when the second container 2 is shrunk, it is assured that the positional relationship between the flap 5 of the first container 1 and the opening or weakened line of the second container will coincide with each other.

Fig. 15 shows another embodiment which is used to explain a fixing means, and Fig. 16 is a cross sectional view taken along line XVI-XVI in Fig. 15. In this embodiment, the first container and the second container 2 are attached to each other by means of an adhesive 6, such as a pressure sensitive adhesive. The adhesive 6 may be applied to any portion as long as the surface 11 of the first container 1 and the surface 21 of the second container 2 are in contact with each other at the portion, and the adhesive may be applied to the first container 1 or the second container 2. It is preferable that the adhesive is applied to a portion around an opening or a weakened line 27 or 28 of the second container 2 by, for example, printing.

Some embodiments of the first container 1 contained in the second container 2 will now be explained with reference to Figs. 17 through 20.

The first container illustrated in Fig. 17 is a package of a pillow configuration. The constructions of the flap 5 and the opening are substantially the same as those illustrated in Fig. 3. More specifically, a perforated line drawn in a closed loop (which corresponds to that designated by 13 in Fig. 3) is formed in the surface 11 of the first container 1, and a flap having a pressure sensitive adhesive 51 applied thereto is attached to the surface 11. When the flap 5 is taken up, the portion 14 surrounded by the perforated line is removed from the first container 1 and is adhered

to the pressure sensitive adhesive 51. Accordingly, an opening 11a is formed for dispensing the wet fibrous materials 3.

The first container 1 illustrated in Fig. 18 has a construction substantially the same as that illustrated in Fig. 17, however, a perforated line drawn in a U-shape is formed in place of the perforated line drawn in a closed loop. The pressure sensitive adhesive is similarly applied to the inner side of the flap 5. When the flap is opened, the portion surrounded by the perforated line drawn in a U-shape is removed from the main body of the first container 1, while one end of the flap remains connected to the main body.

Fig. 19 is a perspective view illustrating a first container of another type, and Fig. 20 is a cross sectional view taken along line XX-XX in Fig. 19. In this embodiment, a sheet 7 having a pressure sensitive adhesive applied to the upper surface thereof is located inside of the container 1 and is attached to the rear side of the surface 11 of the first container 1. A continuous weakened line 15 is formed in the surface 11 of the first container 1, and the ends of the weakened line 15 are formed in an arc. Upon use, when the weakened line 15 is taken up, the portion 72 surrounded by the closed loop 71 in the sheet 7 is removed together with the portion 16 surrounded by the weakened line 15 in the first container 1 while it is adhered to the latter. The space in the sheet 7 formed by the removal of the portion 72 surrounded by the closed loop 71 is used as an opening for dispensing the wet fibrous materials 3, and the portion 16 in the first container surrounded by the weakened line 15 serves as a flap.

Each first container 1 illustrated in Figs. 17 through 20 is of a pillow type, however, a three sided seal package or a four sided seal package may be used as a first container.

In all the embodiments described above, a flap is attached to the first container or is formed by a part of the first container 1. Contrary to this, in the embodiment illustrated in Fig. 21, a flap is not attached to the first container, but a flap is formed by a part of the surface of the second container 2.

More specifically, a punching line 13 is formed in the surface 11 contacting to the second container to a depth half of the thickness of the sheet as illustrated in Fig. 22 in place of the perforated line, and said punching line will be referred to as a "half punching line" hereinbelow. A U-shaped perforated line 34 is formed at a portion of surface 21 corresponding to the half punching line 13, and a pressure sensitive adhesive 35 is applied to the inside of the surface 21 of the second container 2, which surface contacts the first container 1. It is preferable that a part 36 of the inside of the surface 21 remains uncoated with the pressure sensitive adhesive so as to form a gripping portion and so as to facilitate easy pulling of the portion surrounded by the U-shape in the second container 2.

According to this embodiment, during the manufacturing process of the dispenser-container containing wet and dry contents of the present invention, the bottom of the half punching line 13 does not reach the inside of the first container 1, and accordingly, the first container 1 can be hermetically sealed against gas or liquid, even if it is not provided with a flap.

Upon use of the dispenser-container of the present invention, the portion surrounded by the U-shaped perforated line 34 in the second container 2 is taken up, the portion 14 in the first container surrounded by the punching line 13 is pulled up together therewith and is removed from the first container 1, and the space formed by removal is used as an opening for dispensing wet fibrous materials 3.

It is noted that the first container 1 is not limited to the embodiments described above. Any conventionally known package may be used as a first container as long as it is made of a gas impervious sheet and has an opening for dispensing the wet fibrous materials therethrough or a weakened line for forming the opening, and as long as the opening or weakened line can be resealably covered by a flexible flap, which is capable of being repeatedly opened and closed.

Fig. 23 is a flow diagram of an embodiment of a process according to the present invention for manufacturing dispenser-containers illustrated in Figs. 1 through 5.

First, first containers 1 containing wet fibrous materials 3 are prepared, and materials in a dry condition, which were described above are also prepared.

Fig. 23 illustrates an embodiment of a process for manufacturing the first containers 1 which have a construction similar to that illustrated in Fig. 17. In this embodiment, perforated lines 13 are formed at positions, where openings will be formed, in the gas impervious sheet 10 used for forming the first container 1, by means of a press 101, and thereafter, flaps 5 are attached to the gas impervious sheet 10 by means of a labeler 102 or by a human hand so as to cover the perforated lines 13 formed in the gas impervious sheet 10.

The flap 5 has a pressure sensitive adhesive 51 applied to the surface contacting the gas impervious sheet 10 except for a grip portion 52, as illustrated in Fig. 3. It is preferable that one end of the flap 5 is fixed to the sheet 10 by means of a heat sealer 103, as illustrated in Fig. 23. As described above, the first containers 1 are prepared first.

Wet fibrous materials 3 are placed on the perforated line 13 on the surface opposite to the surface where the flaps 5 are attached. Then, the wet fibrous materials 3 are wrapped by means of a packaging apparatus which comprises a guide member 104, center heat sealer 105 and a transverse beat sealer 106. The sheet 10 is cut in a transverse direction by means of a cutter 107 to form individual dispenser-containers, and thus first container 1 containing the wet fibrous materials 3 is obtained.

In place of the perforated line drawn in a closed loop, in Fig. 23, an opening may be formed by completely punching the gas impervious sheet by

means of a press 101, or a perforated line may be formed in a U-shape so as to form a first container as illustrated in Fig. 18.

Other types of inner containers, such as illustrated in Fig. 19, may be manufactured in the following methods.

A weakened line of an open loop, for example, of a U-shape, is formed in the gas impervious sheet. A piece of sheet, which has a perforated line formed in a closed loop and a pressure sensitive adhesive applied on one side thereof, is attached to the surface of the gas impervious sheet which is inside of the first container in such a manner that it covers the open looped weakened line formed in the gas impervious sheet for a first container. Wet fibrous materials are placed on the piece of sheet, and then, they are wrapped and packed by the gas impervious sheet.

The first container 1 illustrated in Fig. 1, is of a pillow type configuration, however, a three sided seal package or four sided seal package may be used as a first container.

It is noted that the first container is not limited to those described above. Any conventionally known package may be used as a first container as long as it is made of a gas impervious sheet and has an opening for dispensing the wet fibrous materials therethrough or a weakened line for forming the opening, and as long as the opening or weakened line can be covered by a flexible flap, which is capable of being repeatedly opened and closed.

It is preferable that the size of the materials in a dry condition is almost the same as the size of the wet fibrous materials so as to facilitate their easy stacking. If the materials in a dry condition are, for example, prepared bandages of the "Band-Aid" type, which are used as small individual pieces, it is preferable that a group of prepared bandages of the "Band-Aid" type are connected together having perforated lines therebetween so as to be able to be individually cut rather than individually packing the same. Further, if the materials in a dry condition are made of a sheet-like material such as a tissue paper, it is preferable that the sheet-like materials are folded in a size harmonizing with the size of the first container containing wet fibrous materials.

Then, both the first containers 1 and the materials in a dry condition 4 are wrapped by the second container 2, as illustrated in Fig. 1. More specifically, openings 21a for dispensing the wet fibrous materials are formed at a predetermined distance on a continuous sheet 20 used for the second containers 2 by means of a press 201.

Together with the formation of the openings 21a, a perforated line 26 is formed so that it extends in a longitudinal direction of the continuous sheet 20 and it is parallel to the openings 21a.

The first containers 1 are placed on the continuous sheet 20. In this case, they are directed so that the flaps 5 of the first containers 1 are located at the underside of the first container and are made coincident with the openings 21a formed in the continuous sheet 20.

The materials in a dry condition 4 are supplied onto the first containers 1.

The continuous sheet 20 is guided by a guide member 202, and the first containers 1 and the materials in a dry condition 4 are wrapped by the continuous sheet 20 while they are stacked with each other. A heat sealer 203 seals the longitudinal edges 24 of the continuous sheet 20. Then, a transverse heat sealer 204 transversely heat seals the continuous sheet 20 at the portion 23, and forms a second container connected to the continuous sheet 20 at the heat sealed portions 23.

A cutter 205 transversely cuts the heat sealed portions 23 or the portions near the heat sealed portions 23 to form individual dispenser-containers 7.

Furthermore, in place of the formation of the perforated line 26 extending in the longitudinal direction of the continuous sheet 20, openings may be formed at a portion parallel to the openings 21a in a suitable shape, for example, a length of perforated lines or a length of slits, so as to use for dispensing the materials in a dry condition 4 therethrough.

With respect to the supply of the first container 1 and the materials in a dry condition 4 onto the continuous sheet 20, in Fig. 4, the first container is supplied prior to the materials in a dry condition 4. However, contrary to this, the materials in a dry condition 4 may be placed first on the perforated line 26 corresponding to the opening 21a, and then, the first container 1 is placed on the materials in a dry condition 4, and thereafter, they may be wrapped by the continuous sheet.

The second container 2 of the embodiment illustrated in Figs. 8 and 9 may be manufactured as follows. In the manufacturing process illustrated in Fig. 23, the positions of openings 21a and the perforated line 26 formed in the continuous sheet 20 are displaced a small distance in a transverse direction of the continuous sheet 20, and the longitudinal seal by the heat sealer 203 is performed at a position near the center of the width of the second container 2.

Fig. 24 is a flow diagram of a process of the present invention for manufacturing such a four-sided seal package as illustrated in Fig. 7.

Also in this embodiment, a first container 1 and materials in a dry condition 4 are previously prepared similar to the case in the embodiment illustrated in Fig. 23.

A second container 2 consists of two continuous sheets, and openings 21a for dispensing the wet fibrous materials are formed in a first continuous sheet 20 by means of a press 201 at an approximate center of the width of the first continuous sheet 20 and at a predetermined distance in a longitudinal direction of the first continuous sheet. In place of the openings 21a, a perforated line or a weakened line 27 or 28 as shown in Fig. 6 or 7 may be formed.

The first containers 1 are placed on the con-

tinuous sheet 20 in such a manner that the flaps 5 of the first containers 1 are located at the underside of the first containers 1 and are made coincident with the openings 21a formed in the first continuous sheet 20.

Then, the materials in a dry condition 4 are supplied onto the first containers 1, and a second continuous sheet 30 is guided over them.

In the second continuous sheet 30, openings are formed in parallel with the openings 21a for dispensing the materials in a dry condition therethrough or weakened lines are formed for forming the openings, such as a perforated line 36 extending in the longitudinal direction of the second continuous sheet 30, or a length of slits.

The first container 1 and the materials in a dry condition 4 overlap each other and are sandwiched by the first and second continuous sheets 20 and 30.

The following alternative embodiments are possible. The materials in a dry condition 4 are supplied onto the second continuous sheet 30, and then, the first containers 1 are placed on the materials in a dry condition 4 in such a manner that the flaps 5 of the first containers 1 are directed upwardly, and thereafter, the first continuous sheet 20 is supplied onto them. Also in this case, the first containers 1 should be placed on the materials in a dry condition 4 in such a manner that the flaps 5 are made coincident with the openings 21a formed in the first continuous sheet 20.

A heat sealer 203 seals the longitudinal edges of the first and second continuous sheets 20 and 30 to form heat sealed portions 24.

Then, a transverse heat sealer 204 transversely heat seals the continuous sheets 20 and 30, and forms a second container with heat sealed portions 23.

It is possible that the longitudinal edges are heat sealed after the transverse seal has been conducted.

A cutter 205 transversely cuts the heat sealed portions 23 or the portions near the heat sealed portions 23 to form individual dispenser-containers 7.

Fig. 25 is a flow diagram of another embodiment of a manufacturing process according to the present invention for manufacturing a dispenser-container illustrated in Figs. 10 and 11.

Also in this embodiment, first containers 1 and materials in a dry condition 4 are previously prepared similar to the embodiment illustrated in Fig. 23.

Openings 21a for dispensing the wet fibrous materials are formed in a continuous sheet 20 used for the second container 2 by means of a press 201 at an approximate center of the width of the continuous sheet 20 and at a predetermined distance in a longitudinal direction of the continuous sheet. In place of the openings 21a, a perforated line or a weakened line 27 or 28 as shown in Fig. 6 or 7 may be formed.

The first containers 1 are placed on the continuous sheet 20 in such a manner that the flaps 5 of the first containers 1 are located at the underside of the first containers 1 and are made coincident with the openings 21a formed in the continuous sheet 20.

Then, the materials in a dry condition 4 are supplied onto the first containers 1.

The continuous sheet 20 is guided by the guide member 202 which wraps both the first containers 1 and the materials in a dry condition 4 while they are stacked with each other. Although the longitudinal edges 24 of the continuous sheet 20 are gathered together and are overlapped, they are not heat sealed in this embodiment.

Then, a transverse heat sealer 204 transversely heat seals the continuous sheet 20 and forms a second container connected to the continuous sheet 20 at heat sealed portions 23.

A cutter 205 transversely cuts the heat sealed portions 23 or portions near the heat sealed portions 23 to form individual dispenser-containers 7.

The dispenser-container of the present invention is suitable for containing wet fibrous materials together with materials in a dry condition, and it is very compact and portable.

According to the process of the present invention, a dispenser-container containing wet and dry contents can be easily and continuously manufactured. More specifically, contents in a wetted condition are packed first in a first container, and then, a second container is used to pack both the inner contents and the wet fibrous materials.

Accordingly, when the first container and the materials in a dry condition are packed by the second container, the first container can be treated like the usual dry contents. Therefore, the packing process comprising supplying, transferring and wrapping steps can be simplified.

Furthermore, according to the present process, the liquid contained in the wet fibrous materials does not leak out during the wrapping step by the second container. Therefore, the liquid does not wet the materials in a dry condition, and the commercial value of the dispenser is not diminished. In addition, the portion to be heat sealed is not wetted and can be easily heat sealed.

Furthermore, according to the dispenser-container containing wet and dry contents, a relatively thick sheet is used for the first container so as to be impervious against gas and liquid, however, the sheet for the second container can be relatively thin. As a result, the cost of the sheets used for the whole dispenser-container containing wet and dry contents can be minimized. In addition, if the second container is heat sealed while it is overlapped with the heat sealed portions of the first container as illustrated in Fig. 12, the heat sealing step can be surely conducted because the thermal energy can be transferred through a thin film.

As described above, the dispenser-container containing wet and dry contents of the present invention is easy to manufacture and can be continuously manufactured, and the cost of

sheets can be low. As a result, the products of low price can be presented.

Claims

1. A dispenser-container containing wet fibrous materials (3) and dry materials (4) separated from each other, comprising:

a first container (1) made of a gas impervious material and containing said wet fibrous materials (3);

said first container (1) including one of a first opening (11a) and a first weakened line (13, 71) for forming said first opening (11a), to permit dispensing of said wet fibrous materials (3) therethrough;

a flexible flap (5, 16) for releasably covering said first opening (11a);

said first container (1) including a pressure sensitive adhesive (51) which permits said flap (5, 16) to be repeatedly attached to and removed from said first container (1); and

a second container (2) containing dry materials (4);

said second container (2) including a first surface (22) having one of a second opening (32 and 33) and a second weakened line (26, 36) for forming said second opening, to permit dispensing of said dry materials (4) therethrough, characterized in that

said second container (2) contains said first container (1) and includes a third surface (21) having one of a third opening (21a) and a third weakened line (27, 28) for forming said third opening, at a position corresponding with said first opening (11a).

2. A dispenser-container according to claim 1, wherein said first weakened line (13) is formed as a closed loop surrounding a portion (14) of one surface (11) of said first container (1), and said one portion (14) is completely removed from said first container (1) to form said first opening (11a).

3. A dispenser-container according to claim 1, wherein said first weakened line (13) is formed in a substantially U-shaped configuration in surrounding relation to a portion (14) of one surface (11) of said first container (1), and said portion (14) of said one surface (11) of said first container (1) is only partially disengaged from said first container (1) to form said first opening (11a).

4. A dispenser-container according to claim 1, wherein said second container (2) includes opposite longitudinal edges (24) which are heat sealed, and opposite transverse edges (23) which are heat sealed.

5. A dispenser-container according to claim 1, wherein said second container (2) includes opposite transverse edges (23) which are heat sealed, and said first surface (22) thereof includes opposing longitudinal edges (31) offset from said second opening and which are heat sealed.

6. A dispenser-container according to claim 1, wherein said first surface (22) thereof includes opposing longitudinal ends (32, 33) which overlap each other and form said second opening.

7. A dispenser-container according to claim 1, wherein said first container (1) is adhered to an inner wall of said second container (2) for maintaining accurate alignment between said first opening (11a) and third opening (21a).

8. A dispenser-container according to claim 7, wherein adherence of said first container (1) to said inner wall of said second container (2) maintains respective accurate alignment between said first opening (11a), third opening (21a), second opening and said wet fibrous materials (3) and dry materials (4).

9. A dispenser-container according to claim 7, wherein said first container (1) is adhered to said inner wall by a heat seal.

10. A dispenser-container according to claim 7, wherein said first container (1) is adhered to said inner wall of said second container (2) by an adhesive.

11. A dispenser-container according to claim 1, wherein said second container (2) is made of a heat shrinkable material which is shrunk to provide accurate alignment of said first opening (11a) and said third opening (21a).

12. A method of producing a dispenser-container containing wet fibrous materials (3) and dry materials (4) separated from each other, comprising the steps of:

preparing a first container (1) made of a gas impervious material and containing said wet fibrous materials (3), said first container (1) including one of a first opening (11a) and a first weakened line (13, 71) for forming said first opening (11a), to permit dispensing of said wet fibrous materials (3) therethrough, a flexible flap (5, 16) for releasably covering said first opening (11a), and a pressure sensitive adhesive (51) which permits said flap (5, 16) to be repeatedly attached to and removed from said first container (1);

forming one of a third opening (21a) and a third weakened line (27, 28) for forming said third opening (21a), in a continuous sheet (20);

forming one of a second opening and a second weakened line (26) for forming said second opening in said continuous sheet (20) at a position parallel to and offset from said third opening (21a), to permit dispensing of said dry materials (4) therethrough;

positioning said first container (1) on said continuous sheet (20) with the flap (5) thereof coinciding with said third opening (21a) formed in said continuous sheet (20), and positioning said dry materials (4) in stacked relation on the surface of said first container (1) opposite to said flap (5);

wrapping said stacked first container (1) and dry materials (4) with said continuous sheet (20) such that said second opening is formed with respect to said dry materials (4);

sealing at least two longitudinal edges (24) of said continuous sheet (20) with each other; and

sealing said continuous sheet (20) in a transverse direction.

13. A method according to claim 12, further comprising the steps of repeating all of said previous steps, and after all of said previous steps have been completed, cutting said continuous

sheet in a transverse direction to form individual dispenser-containers.

14. A method of producing a dispenser-container containing wet fibrous materials (3) and dry materials (4) separated from each other, comprising the steps of:

preparing a first container (1) made of a gas impervious material and containing said wet fibrous materials (3), said first container (1) including one of a first opening (11a) and a first weakened line (13, 71) for forming said first opening (11a), to permit dispensing of said wet fibrous materials (3) therethrough, a flexible flap (5, 16) for releasably covering said first opening (11a), and a pressure sensitive adhesive (51) which permits said flap (5, 16) to be repeatedly attached to and removed from said first container (1);

forming one of a third opening (21a) and a third weakened line (27, 28) for forming said third opening (21a), in a continuous sheet (20);

positioning said first container (1) on said continuous sheet (20) with the flap (5, 16) thereof coinciding with said third opening (21a) formed in said continuous sheet (20), and positioning said dry materials (4) in stacked relation on the surface of said first container (1) opposite said flap (5, 16);

wrapping said stacked first container (1) and dry materials (4) with said continuous sheet (20);

overlapping longitudinal edges (32, 33) of said continuous sheet (20) with each other to form a second opening to permit dispensing of said dry materials (4) therethrough; and

sealing said continuous sheet (20) in a transverse direction.

15. A method according to claim 14, further comprising the steps of repeating all of said previous steps, and after all of said previous steps have been completed, cutting said continuous sheet (20) in a transverse direction to form individual dispenser-containers.

16. A method of producing a dispenser-container containing wet fibrous materials (3) and dry materials (4) separated from each other, comprising the steps of:

preparing a first container (1) made of a gas impervious material and containing said wet fibrous materials (3), said first container (1) including one of a first opening (11a) and a first weakened line (13) for forming said first opening (11a), to permit dispensing of said wet fibrous materials (3) therethrough, and a flexible flap (5, 16) for releasably covering said first opening (11a), by a pressure sensitive adhesive (51);

forming one of a third opening (21a) and a third weakened line (27, 28) for forming said third opening (21a), in a first continuous sheet (20);

forming one of a second opening (36) and a second weakened line for forming said second opening (36) in a second continuous sheet (30), to permit dispensing of said dry materials (4);

positioning said first container (1) and said dry materials (4) between said first and second continuous sheets (20, 30) such that said flap (5) is positioned coinciding with said third opening (21a) of said first continuous sheet (20), said dry materials (4) are positioned in stacked relation with said first container (1) on the surface thereof opposite to said flap (5, 16) and in correspondence with said second opening (36) in said second continuous sheet (30);

sealing longitudinal edges (24) of said first and second continuous sheets (20, 30) with each other; and sealing said continuous sheets (20, 30) in a transverse direction.

17. A method according to claim 16, further comprising the steps of repeating all of said previous steps, and after all of said previous steps have been completed, cutting said continuous sheets (20, 30) in a transverse direction to form individual dispenser-container.

Patentansprüche

1. Ausgabebehälter, der feuchte faserige Materialien (3) und trockene Materialien (4) enthält, die voneinander getrennt sind, mit

einem ersten Behälter (1) aus einem für Gas undurchlässigen Material, der die feuchten faserigen Materialien (3) enthält;

wobei der erste Behälter (1) eine erste Öffnung (11a) aufweist und eine erste geschwächte Linie (13, 71) zur Erzeugung der ersten Öffnung (11a), um die Herausnahme des feuchten faserigen Materials (3) zu ermöglichen;

einer flexiblen Lasche (5, 16) für die lösbare Abdeckung der ersten Öffnung (11a);

wobei der erste Behälter (1) einen druckempfindlichen Klebstoff (51) aufweist, der es ermöglicht, daß die Lasche (5, 16) wiederholt am ersten Behälter (1) befestigt und von diesem wieder entfernt werden kann; und mit

einem zweiten Behälter (2), der trockene Materialien (4) enthält;

wobei der zweite Behälter (2) eine erste Oberfläche (22) aufweist mit einer zweiten Öffnung (32 und 33) und einer zweiten geschwächten Linie (26, 36) zur Ausbildung der zweiten Öffnung, um die Herausnahme der trockenen Materialien (4) zu ermöglichen, dadurch gekennzeichnet, daß

der zweite Behälter (2) den ersten Behälter (1) enthält und eine dritte Oberfläche (21) aufweist, die eine dritte Öffnung (21a) und eine dritte geschwächte Linie (27, 28) zur Ausbildung der dritten Öffnung in einer Position entsprechend der ersten Öffnung (11a) hat.

2. Ausgabebehälter nach Anspruch 1, in dem die erste geschwächte Linie (13) die Form einer geschlossenen Schlinge aufweist, die ein Teil (14) der einen Oberfläche (11) des ersten Behälters (1) einschließt und in dem das Teil (14) vom ersten Behälter (1) vollständig unter Erzeugung der ersten Öffnung (11a) entfernt wird.

3. Ausgabebehälter nach Anspruch 1, in dem die erste geschwächte Linie (13) zu einer praktisch U-förmigen Konfiguration ausgebildet ist und dabei ein Teil (14) der Oberfläche (11) des ersten Behälters (1) umgibt, und in dem das Teil (14) der einen Oberfläche (11) des ersten Behälters (1) nur teilweise vom ersten Behälter (1) unter Erzeugung der ersten Öffnung (11a) gelöst wird.

4. Ausgabebehälter nach Anspruch 1, in dem der zweite Behälter (2) einander gegenüberliegende Längskanten (24) aufweist, die hitzeversiegelt sind und einander gegenüberliegende Querkanten (23), die hitzeversiegelt sind.

5. Ausgabebehälter nach Anspruch 1, in dem der zweite Behälter (2) einander gegenüberliegende Querkanten (23) aufweist, die hitzeversiegelt sind und in dem die erste Oberfläche (22) einander gegenüberliegende Längskanten (31) aufweist, die von der zweiten Öffnung abgesetzt und hitzeversiegelt sind.

6. Ausgabebehälter nach Anspruch 1, in dem die erste Oberfläche (22) einander gegenüberliegende Längsteile (32, 33) aufweist, die einander überlappen und die zweite Öffnung bilden.

7. Ausgabebehälter nach Anspruch 1, in dem der erste Behälter (1) an einer inneren Wandung des zweiten Behälters (2) haftet, um eine genaue Ausrichtung zwischen erster Öffnung (11a) und dritter Öffnung (21a) zu gewährleisten.

8. Ausgabebehälter nach Anspruch 7, in dem die Haftung des ersten Behälters (1) an der inneren Wandung des zweiten Behälters (2) eine entsprechende genaue Ausrichtung zwischen der ersten Öffnung (11a), der dritten Öffnung (21a), der zweiten Öffnung sowie den feuchten faserigen Materialien (3) und den trockenen Materialien (4) gewährleistet.

9. Ausgabebehälter nach Anspruch 7, in dem der erste Behälter (1) an der inneren Wandung durch eine Hitzeversiegelung zur Haftung gebracht ist.

10. Ausgabebehälter nach Anspruch 7, in dem der erste Behälter (1) an der inneren Wandung des zweiten Behälters (2) mittels eines Klebstoffes zur Haftung gebracht ist.

11. Ausgabebehälter nach Anspruch 1, in dem der zweite Behälter (2) aus einem wärmeschrumpfbaren Material hergestellt worden ist, das geschrumpft wurde, um eine genaue Ausrichtung von der ersten Öffnung (11a) und der dritten Öffnung (21a) zu erreichen.

12. Verfahren zur Herstellung eines Ausgabebehälters, der feuchte faserige Materialien (3) und trockene Materialien (4), die voneinander getrennt sind, enthält, mit den Stufen:

der Herstellung eines ersten Behälters (1) aus einem für Gas undurchlässigen Material, der die feuchten faserigen Materialien (3) enthält, wobei der erste Behälter (1) eine erste Öffnung (11a) aufweist und eine erste geschwächte Linie (13, 71) zur Ausbildung der ersten Öffnung (11a), um hierdurch die Herausnahme der feuchten faserigen Materialien (3) zu ermöglichen, sowie eine flexible Lasche (5, 16) für die lösbare Abdeckung der ersten Öffnung (11a), und einen druckempfindlichen Klebstoff (51), der es ermöglicht, daß die Lasche (5, 16) wieder entfernt werden kann;

der Ausbildung einer dritten Öffnung (21a) und einer dritten geschwächten Linie (27, 28) zur Ausbildung der dritten Öffnung (21a) in einem endlosen Blatt (20);

der Ausbildung einer zweiten Öffnung und einer zweiten geschwächten Linie (26) zur Ausbildung der zweiten Öffnung in dem endlosen Blatt (20) in einer Position parallel zu und versetzt gegenüber der dritten Öffnung (21a), um die Herausnahme der trockenen Materialien (4) zu ermöglichen;

Inlagebringen des ersten Behälters (1) auf das endlose Blatt (20) derart, daß die Lasche (5) mit der dritten Öffnung (21a), die in dem endlosen Blatt (20) ausgebildet wurde, zusammenfällt sowie Inlagebringen der trockenen Materialien (4) in geschichteter Weise auf der Oberfläche des ersten Behälters (1) gegenüber der Lasche (5);

der Umhüllung des ersten Behälters (1) mit den aufgeschichteten trockenen Materialien (4) mit dem endlosen Blatt (20) derart, daß die zweite Öffnung bezüglich der trockenen Materialien (4) erzeugt wird;

der Versiegelung von mindestens zwei Längskanten (24) des endlosen Blattes (20) miteinander und

der Versiegelung des endlosen Blattes (20) in Querrichtung.

13. Verfahren nach Anspruch 12, mit den weiteren Stufen der Wiederholung sämtlicher der vorherigen Stufen und Zerschneiden des endlosen Blattes in Querrichtung unter Erzeugung einzelner Ausgabehälter, nachdem sämtliche vorherigen Stufen durchgeführt worden sind.

14. Verfahren zur Herstellung eines Ausgabebehälters, der feuchte faserige Materialien (3) und trockene Materialien (4), die voneinander getrennt sind, enthält, mit den Stufen:

der Herstellung eines ersten Behälters (1), aus einem für Gas undurchlässigen Material, der die feuchten faserigen Materialien (3) enthält, wobei der erste Behälter (1) eine erste Öffnung (11a) und eine erste geschwächte Linie (13, 71) zur Ausbildung der ersten Öffnung (11a) aufweist, um eine Herausnahme des feuchten faserigen Materials (3) zu ermöglichen, sowie eine flexible Lasche (5, 16) zur lösbaren Abdeckung der ersten Öffnung (11a), und einem druckempfindlichen Klebstoff (51), der es ermöglicht, daß die Lasche (5, 16) wiederholt am ersten Behälter (1) befestigt und von diesem wieder entfernt werden kann;

der Erzeugung einer dritten Öffnung (21a) und einer dritten geschwächten Linie (27, 28) zur Ausbildung der dritten Öffnung (21a) in einem endlosen Blatt (20);

Inlagebringen des ersten Behälters (1) auf dem endlosen Blatt (20) derart, daß die Lasche (5, 16) mit der dritten Öffnung (21a), die in dem endlosen Blatt (20) ausgebildet wurde, zusammenfällt sowie Inlagebringen der trockenen Materialien (4) in geschichteter Weise auf die Oberfläche des ersten Behälters (1) gegenüber der Lasche (5, 16);

der Umhüllung des ersten Behälters (1) mit den aufgeschichteten trockenen Materialien (4) mit dem endlosen Blatt (20);

der Überlappung der Längskanten (32, 33) des endlosen Blattes (20) mit einander unter Ausbildung einer zweiten Öffnung für die Herausnahme der trockenen Materialien (4) und der Versiegelung des endlosen Blattes (20) in Querrichtung.

15. Verfahren nach Anspruch 14, mit den weite-

ren Stufen der Wiederholung sämtlicher vorangegangener Stufen sowie Zerschneiden des endlosen Blattes (20) in Querrichtung unter Erzeugung einzelner Ausgabebehälter, nachdem sämtliche vorangegangenen Stufen durchgeführt worden sind.

16. Verfahren zur Herstellung eines Ausgabebehälters, der feuchte faserige Materialien (3) und trockene Materialien (4) enthält, die voneinander getrennt sind, mit den Stufen:

der Herstellung eines ersten Behälters (1) aus einem für Gas undurchlässigen Material, der die feuchten faserigen Materialien (3) enthält und der eine erste Öffnung (11a) und eine erste geschwächte Linie (13) zur Ausbildung der ersten Öffnung (11a) aufweist, um die Herausnahme der feuchten faserigen Materialien (3) zu ermöglichen und mit einer flexiblen Lasche (5, 16) für die lösbare Abdeckung der ersten Öffnung (11a) mittels eines druckempfindlichen Klebstoffes (51);

der Ausbildung einer dritten Öffnung (21a) und einer dritten geschwächten Linie (27, 28) zur Ausbildung der dritten Öffnung (21a) in einem ersten endlosen Blatt (20);

der Ausbildung einer zweiten Öffnung (36) und einer zweiten geschwächten Linie für die Ausbildung der zweiten Öffnung (36) in einem zweiten endlosen Blatt (30), um die Herausnahme der trockenen Materialien (4) zu ermöglichen;

Inlagebringen des ersten Behälters (1) und der trockenen Materialien (4) zwischen dem ersten und dem zweiten endlosen Blatt (20, 30) derart, daß die Lasche (5) mit der dritten Öffnung (21a) des ersten endlosen Blattes (20) zusammenfällt, sowie Inlagebringen der trockenen Materialien (4) in aufgeschichteter Weise in Beziehung zum ersten Behälter (1) auf der Oberfläche desselben gegenüber der Lasche (5, 16) und in Übereinstimmung mit der zweiten Öffnung (36) in dem zweiten endlosen Blatt (30);

der Versiegelung der Längskanten (24) des ersten und des zweiten endlosen Blattes (20, 30) miteinander; und

der Versiegelung der endlosen Blätter (20, 30) in Querrichtung.

17. Verfahren nach Anspruch 16, mit den weiteren Stufen der Wiederholung sämtlicher vorangegangener Stufen sowie Zerschneiden der endlosen Blätter (20, 30) in Querrichtung unter Erzeugung einzelner Ausgabebehälter, nachdem sämtliche vorangegangenen Stufen durchgeführt worden sind.

Revendications

1. Récipient distributeur contenant des matièes fibreuses humides (3) et des matières sèches (4) séparées les une des autres, qui comprend:

un premier récipient (1) en une matière imperméable aux gaz et contenant lesdites matières fibreuses humides (3);

ledit premier récipient (1) présentant une première ouverture (11a) ou une première ligne d'affaiblissement (13, 71) servant à former ladite première ouverture (11a) pour permettre la distribution desdites matières fibreuses humides (3) à travers celle-ci;

un rabat flexible (5, 16) pour recouvrir de façon amovible ladite première ouverture (11a);

ledit premier récipient (1) portant un adhésif adhérant par pression (51) qui permet de fixer et d'enlever de façon réitérée ledit rabat (5, 16) sur ledit récipient (1); et

un second récipient (2) contenant des matières sèches (4);

ledit second récipient (2) présentant une première surface (22) comprenant une seconde ouverture (32, 33) ou une seconde ligne d'affaiblissement (26, 36) pour former ladite seconde ouverture et permettre la distribution desdites matières sèches (4) à travers celle-ci, caractérisé en ce que

ledit récipient (2) contient ledit premier récipient (1) et présente une troisième surface (21) ayant une troisième ouverture (21a) ou une troisième ligne d'affaiblissement (27, 28) pour former ladite troisième ouverture en une position qui correspond à ladite première ouverture (11a).

2. Récipient distributeur selon la revendication 1, dans lequel ladite première ligne d'affaiblissement (13) est formée en boucle fermée entourant une portion (14) d'une surface (11) dudit premier récipient (1), et ladite portion (14) est entièrement enlevée du premier récipient (1) pour former ladite première ouverture (11a).

3. Récipient distributeur selon la revendication 1, dans lequel ladite première ligne d'affaiblissement (13) est sensiblement en forme d'un U qui entoure une portion (14) d'une surface (11) dudit premier récipient (1) et ladite portion (14) de ladite surface (11) du premier récipient (1) est seulement en partie dégagée du premier récipient (1) pour former ladite première ouverture (11a).

4. Récipient distributeur selon la revendication 1, dans lequel ledit second récipient (2) comprend des bords longitudinaux opposés (24) qui sont thermoscellés et des bords transversaux opposés (23) qui sont thermoscellés.

5. Récipient distributeur selon la revendication 1, dans lequel ledit second récipient (2) comprend des bords transversaux opposés (23) qui sont thermoscellés et ladite premiére surface (22) de celui-ci comporte des bords longitudinaux opposés (31) déportés à partir de ladite seconde ouverture et qui sont thermoscellés.

6. Récipient distributeur selon la revendication 1, dans lequel ladite première surface (22) présente des extrémités longitudinales opposées (32, 33) qui sont superposées et forment ladite seconde ouverture.

7. Récipient distributeur selon la revendication 1, dans lequel ledit premier récipient (1) adhère à une paroi intérieure dudit second récipient (2) pour maintenir un alignement précis entre ladite première ouverture (11a) et la troisième ouverture (21a).

8. Récipient distributeur selon la revendication 7, dans lequel l'adhérence dudit premier récipient (1) à ladite paroi interne dudit second récipient (2) maintient un alignement respectif précis entre

ladite première ouverture (11a), la troisième ouverture (21a), la seconde ouverture et lesdites matières fibreuses humides (3) et matières sèches (4).

9. Récipient distributeur selon la revendication 7, dans lequel ledit premier récipient (1) adhère à ladite paroi intérieure par l'intermédiaire d'un thermoscellement.

10. Récipient distributeur selon la revendication 7, dans lequel ledit premier récipient (1) adhère à ladite paroi intérieure dudit second récipient (2) à l'aide d'un adhésif.

11. Récipient distributeur selon la revendication 1, dans lequel ledit second récipient (2) est confectionné en une matière thermorétrécissable qu'on fait rétrécir pour obtenir un alignement précis de ladite première ouverture (11a) avec ladite troisième ouverture (21a).

12. Procédé de production d'un récipient distributeur contenant des matières fibreuses humides (3) et des matières sèches (4) séparées les unes des autres, qui consiste à préparer:

un premier récipient (1) en une matière imperméable aux gaz et contenant lesdites matières fibreuses humides (3);

ledit premier récipient (1) présentant une première ouverture (11a) ou une première ligne d'affaiblissement (13, 71) servant à former ladite première ouverture (11a) pour permettre la distribution desdites matières fibreuses humides (3) à travers celle-ci;

un rabat flexible (5, 16) pour recouvrir de façon amovible ladite première ouverture (11a);

ledit premier récipient (1) portant un adhésif adhérant par pression (51) qui permet de fixer et d'enlever de façon réitérée ledit rabat (5, 16) sur ledit récipient (1);

à former une troisième ouverture (21a) ou une troisiéme ligne d'affaiblissement (27, 28) servant à former ladite troisième ouverture (21a) dans une feuille continue (20);

à former une seconde ouverture ou une seconde ligne d'affaiblissement (26) pour former ladite seconde ouverture dans ladite feuille continue (20) en une position parallèle à et déportée de ladite troisième ouverture (21a) afin de permettre la distribution desdites matières sèches (4) à travers cette dernière;

à positionner ledit premier récipient (1) sur ladite feuille continue 20 de manière que son rabat (5) coïncide avec ladite troisième ouverture (21a) formée dans ladite feuille continue (20) et à disposer lesdites matières sèches (4) en empilage sur la surface dudit premier récipient (1) à l'opposé du rabat (5);

à envelopper ledit empilage comprenant le premier récipient (1) et les matières sèches (4) dans une position de la feuille continue (20 telle que ladite seconde ouverture soit formée en coopération avec lesdites matiéres sèches (4);

à sceller au moins deux bords longitudinaux (24) de la feuille continue (20) l'un avec l'autre; et à sceller ladite feuille continue (20) dans un sens transversal.

13. Procédé selon la revendication 12, qui consiste à répéter tous les stades précédents et après l'achèvement de tous les stades précédents, à sectionner ladite feuille continue dans un sens transversal pour former des récipients distributeurs individuels.

14. Procédé de production d'un récipient distributeur contenant des matiéres fibreuses humides (3) et des matières sèches (4) séparées les unes des autres, qui consiste à préparer:

un premier récipient (1) en une matière imperméable aux gaz et contenant lesdites matières fibreuses humides (3);

ledit premier récipient (1) présentant une première ouverture (11a) ou une première ligne d'affaiblissement (13, 71) servant à former ladite première ouverture (11a) pour permettre la distribution desdites matières fibreuses humides (3) à travers celle-ci;

un rabat flexible (5, 16) pour recouvrir de façon amovible ladite première ouverture (11a);

ledit premier récipient (1) portant un adhésif adhérant par pression (51) qui permet de fixer et d'enlever de façon réitérée ledit rabat (5, 16) sur ledit récipient (1);

à former une troisième ouverture (21a) ou une troisième ligne d'affaiblissement (27, 28) servant à former ladite troisième ouverture (21a) dans une feuille continue (20);

à positionner ledit premier récipient 1 sur ladite feuille continue (20) de manière que son rabat (5, 16) coïncide avec ladite troisième ouverture (21a) formée dans ladite feuille continue, et à disposer lesdites matières sèches (4) en empilage sur la surface dudit premier récipient (1) en regard du rabat (5, 16);

à envelopper ledit empilage comprenant le premier récipient (1) et les matières sèches (4) avec ladite feuille continue (20);

à recouvrir les bords longitudinaux (32, 33) de ladite feuille continue (20) les uns avec les utres pour former une seconde ouverture et permettre la distribution desdites matières sèches (4) à travers celle-ci; et

à sceller ladite feuille continue (20) dans une direction transversale.

15. Procédé selon la revendication 14, qui consiste à répéter tous les stades précédents et après l'achèvement de tous ces stades précédents, à découper ladite feuille continue (20) dans une direction transversale pour former les récipients distributeurs individuels.

16. Procédé de production d'un récipient distributeur contenant des matières fibreuses humides (3) et des matières sèches (4) séparées les unes des autres, qui consiste à préparer:

un premier récipient (1) en une matière imperméable aux gaz et contenant lesdites matières fibreuses humides (3);

ledit premier récipient (1) présentant une première ouverture (11a) ou une première ligne d'affaiblissement (13, 71) servant à former ladite première ouverture (11a) pour permettre la distribution desdites matières fibreuses humides (3) à travers celle-ci; et un rabat flexible (5, 16) pour recouvrir de façon amovible ladite première

ouverture (11a) au moyen d'un adhésif adhérant par pression (51);

à former une troisième ouverture (21a) ou une troisième ligne d'affaiblissement (27, 28) servant à former ladite troisième ouverture (21a) dans une première feuille continue (20);

à former une seconde ouverture (36) ou une seconde ligne d'affaiblissement servant à former ladite seconde ouverture (36) dans une seconde feuille continue (30) pour permettre la disposition desdites matières sèches (4);

à positionner ledit premier récipient (1) et lesdites matières sèches (4) entre lesdites première et seconde feuilles continues (20, 30) de façon que le rabat (5) coïncide avec ladite troisième ouverture (21a) de ladite première feuille continue (20), les matières sèches (4) soient superposées avec ledit premier récipient (1) sur la surface en regard dudit rabat (5, 16) et en correspondance avec ladite seconde ouverture (36) dans ladite seconde feuille continue (30);

à sceller les bords longitudinaux (24) des première et seconde feuilles continues (20, 30) ensemble; et

à sceller lesdites feuilles continues (20, 30) dans le sens transversal.

17. Procédé selon la revendication 16, qui consiste en outre à répéter tous les stades précédents et après l'achèvement de tous ces stades précédents, à sectionner lesdites feuilles continues (20, 30) dans un sens transversal pour former un récipient distributeur individuel.

FIG. 1

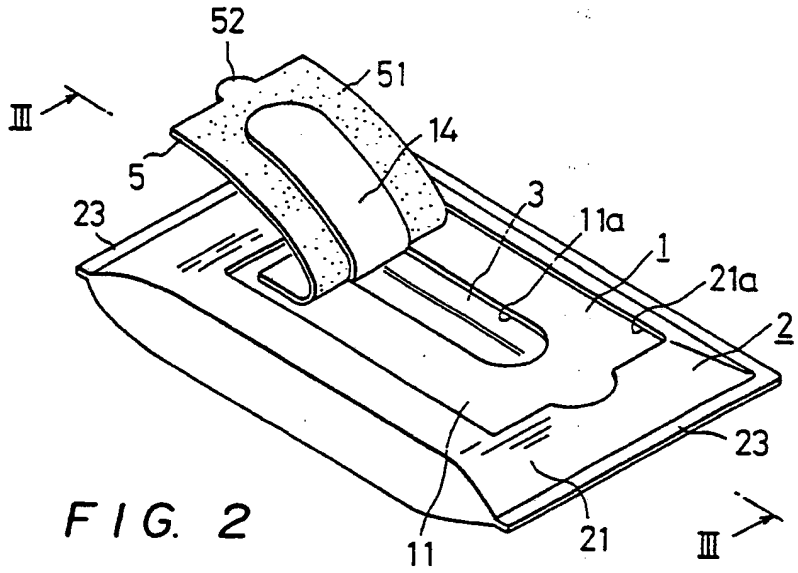


FIG. 2

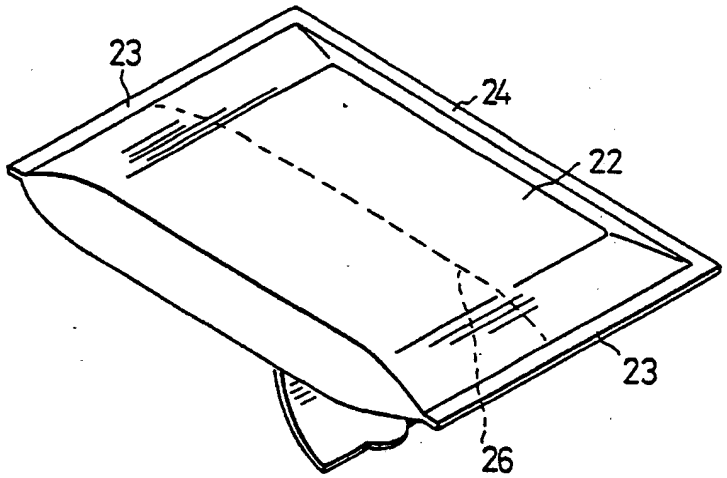


FIG. 3

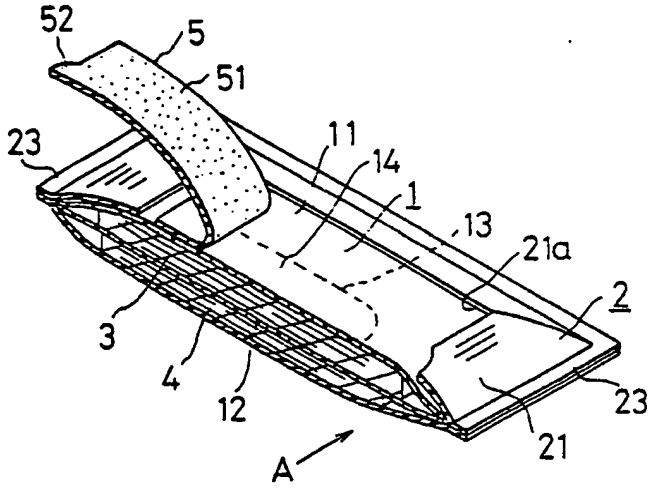


FIG. 4

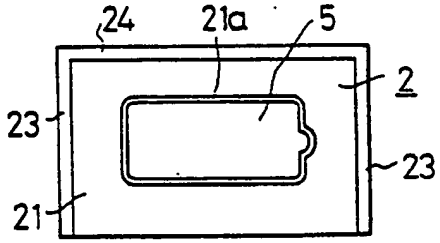


FIG. 5

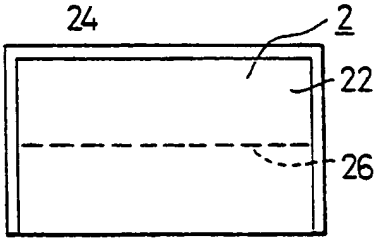


FIG. 6

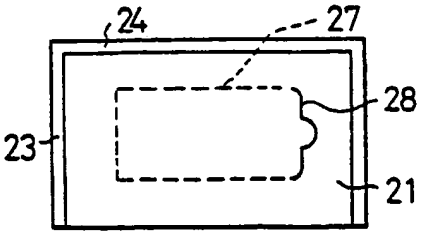


FIG. 7

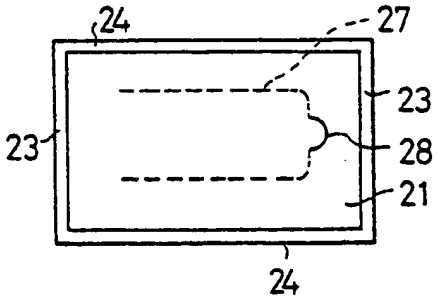


FIG. 8

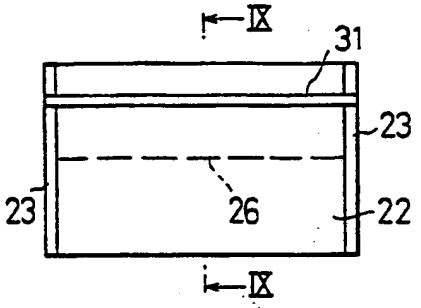


FIG. 9

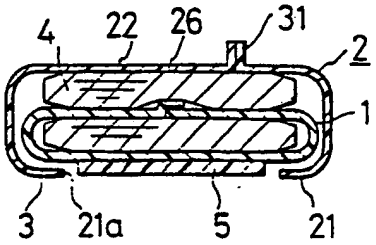


FIG. 10

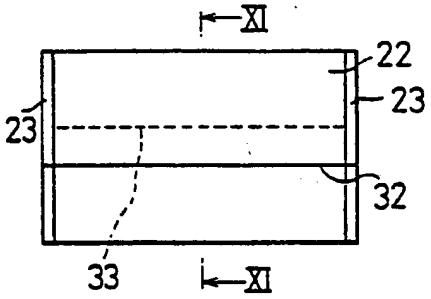


FIG. 11

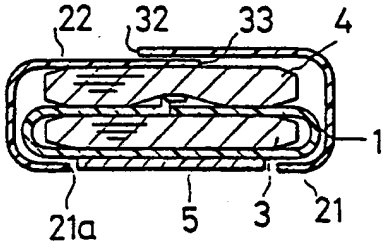


FIG. 12

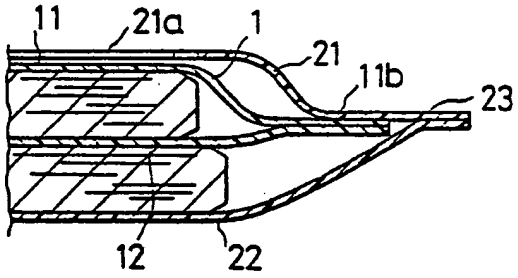


FIG. 13

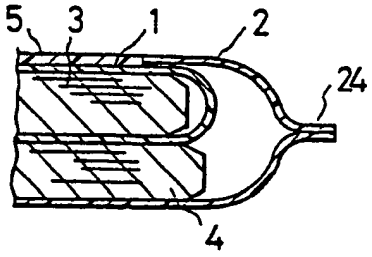


FIG. 14

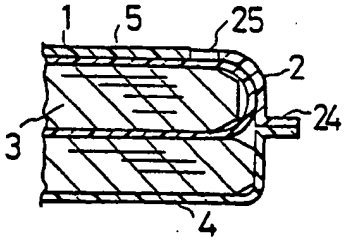


FIG. 15

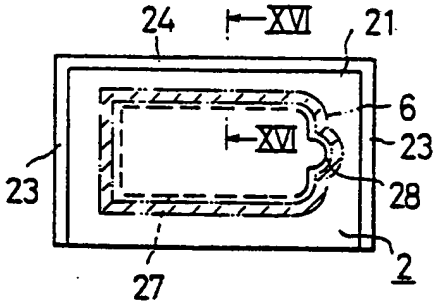


FIG. 16

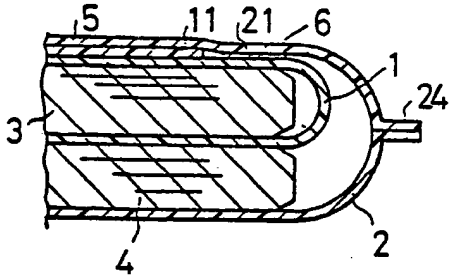


FIG. 17

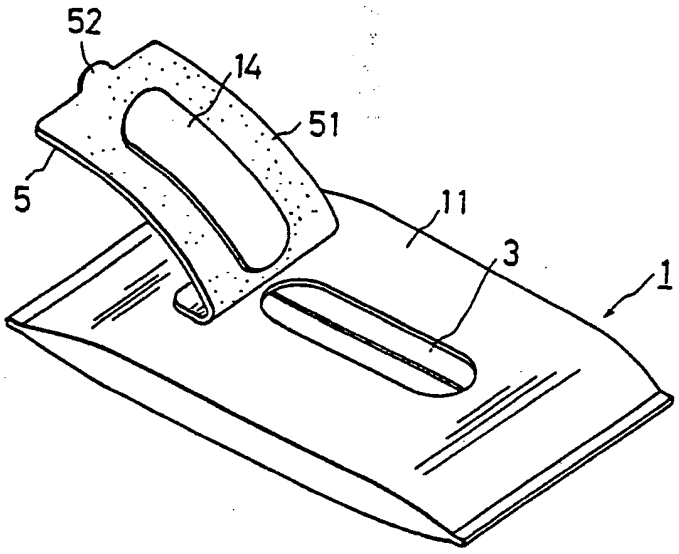
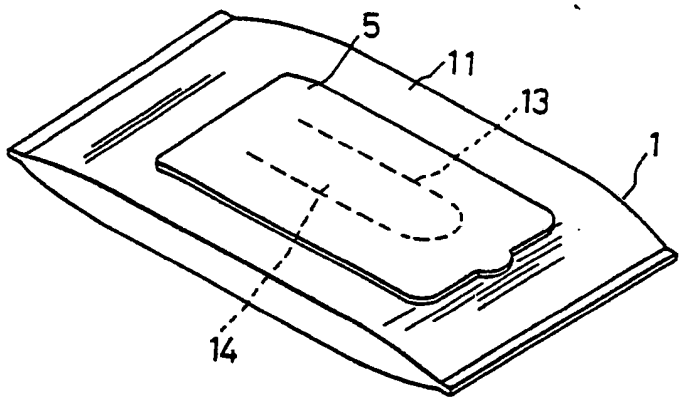


FIG. 18



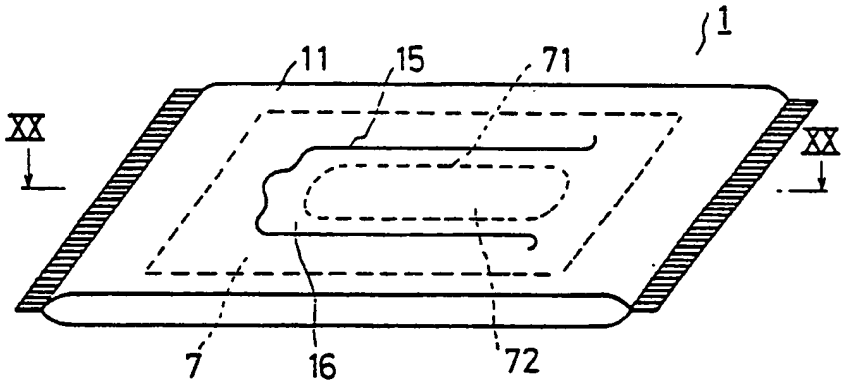


FIG. 20

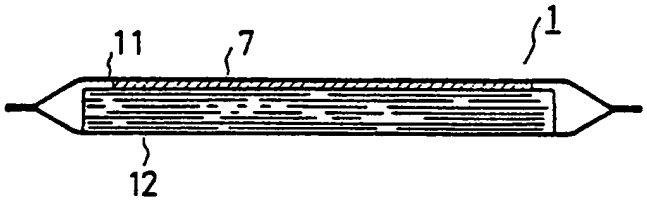


FIG. 21

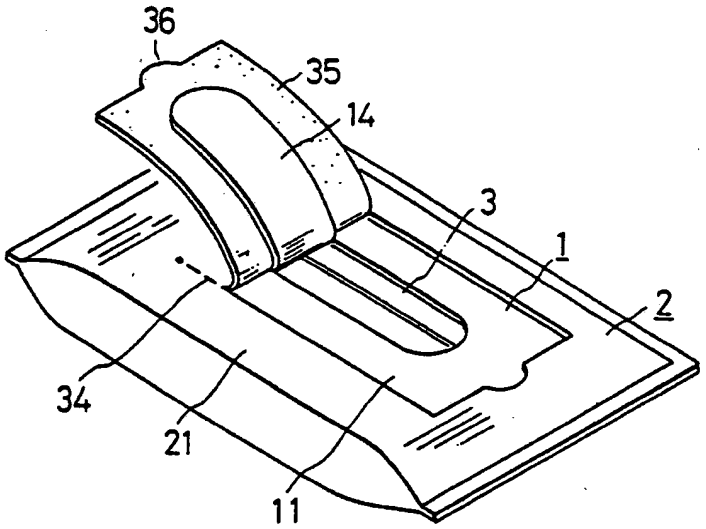


FIG. 22

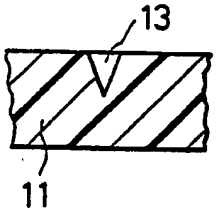


FIG. 23

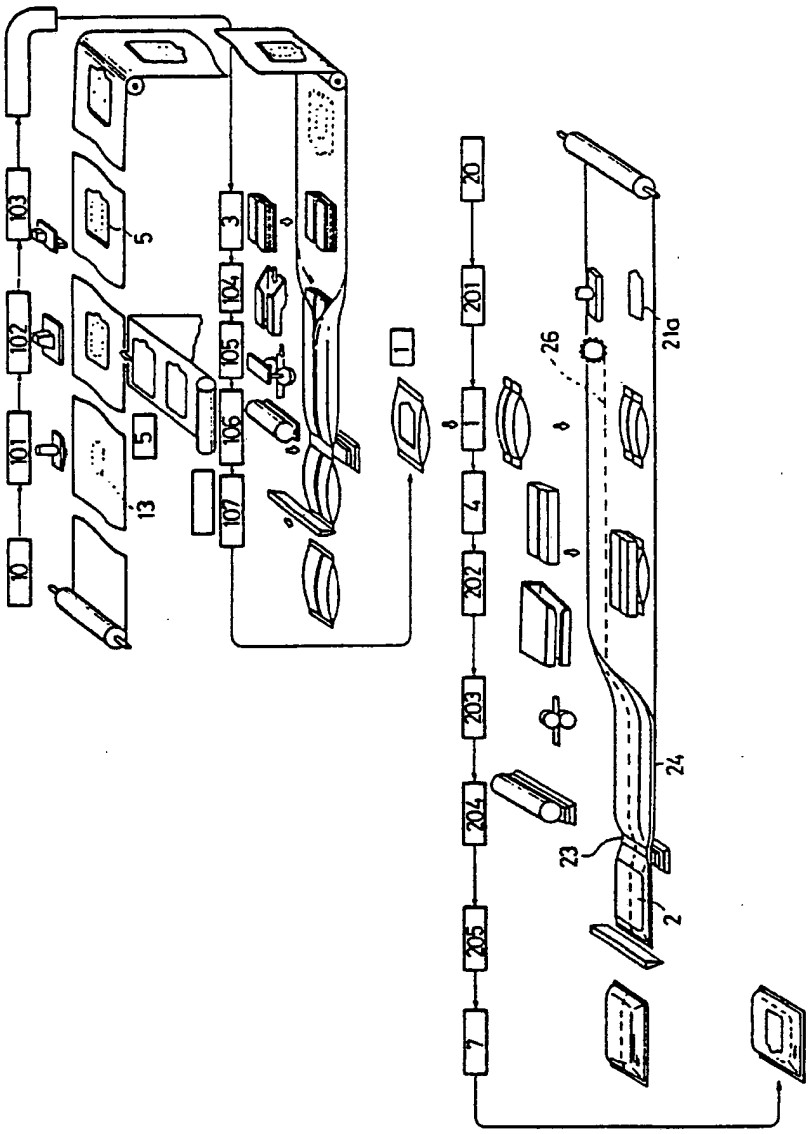

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FIG. 24

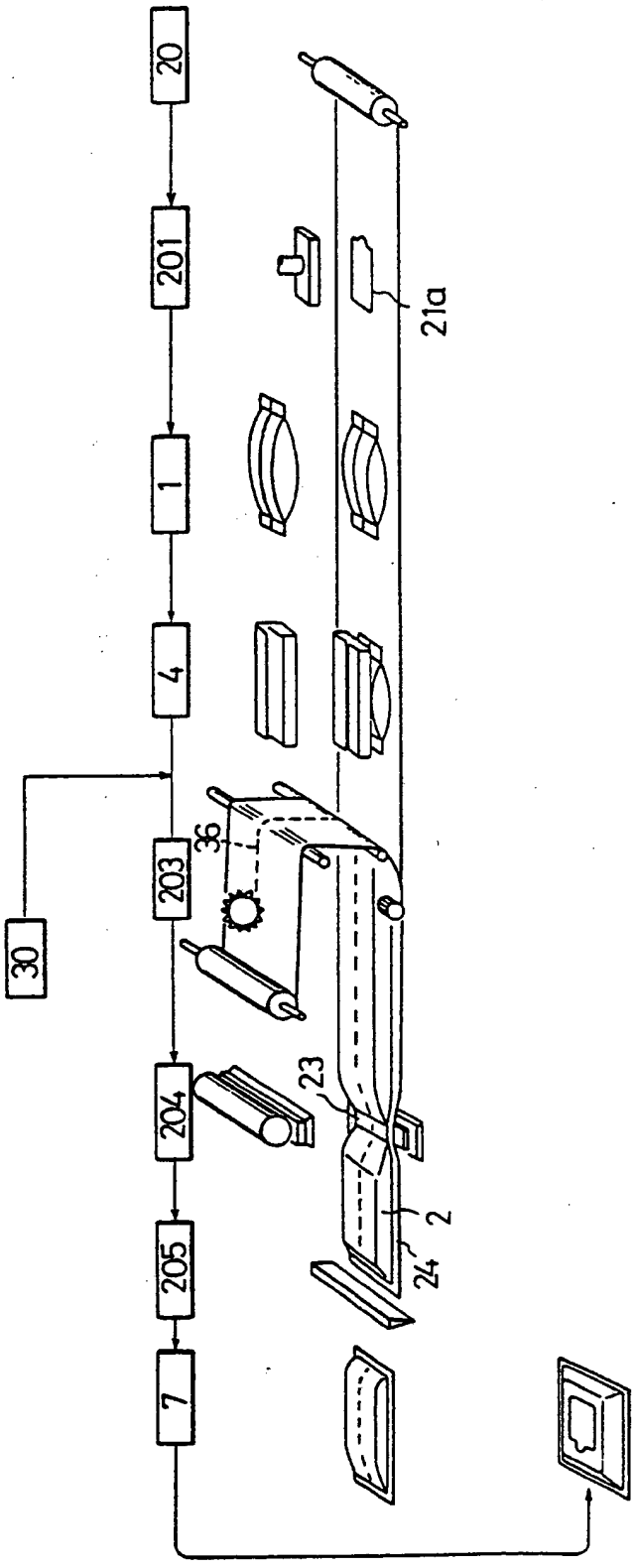

FIG. 25